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BAUMGARTEN et al.(10) **Pub. No.: US 2019/0297155 A1**(43) **Pub. Date: Sep. 26, 2019**(54) **SOFTWARE FRAMEWORK FOR PROGRESS
TRACKING IN A CLASSROOM SETTING**(52) **U.S. Cl.**CPC **H04L 67/22** (2013.01); **G06F 8/70**
(2013.01); **G09B 5/14** (2013.01)(71) Applicant: **Apple Inc.**, Cupertino, CA (US)(72) Inventors: **John S. BAUMGARTEN**, San Jose,
CA (US); **Jennifer U. SONG**, San
Francisco, CA (US); **Marin**
EUBANKS, Santa Clara, CA (US);
Pavel V. DUDRENOV, San Francisco,
CA (US); **Sugam JAIN**, San Francisco,
CA (US); **Leo LEE**, San Jose, CA
(US); **Saman VAFABEE**, San Francisco,
CA (US)

(57)

ABSTRACT

This application relates to a client-server architecture that enables progress tracking related to assignments generated by an instructor. A hand-out can include attachments that specify placeholders for hand-ins and/or activities to be performed by the student as part of the assignment. Some activities can be performed using third-party applications that implement at least a portion of a software framework that causes the applications to generate progress tracking information provided to a daemon executing in the background of a client device. The daemon and/or a client application interface with one or more network services to enable an instructor to utilize the progress tracking information. The network services can include a hand-out service utilized to generate hand-outs assigned to a group of students. The network services can also include a progress pipeline including a number of services configured to process progress tracking information received from a plurality of client devices.

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26, 2018.**Publication Classification**(51) **Int. Cl.****H04L 29/08** (2006.01)**G09B 5/14** (2006.01)**G06F 8/70** (2006.01)